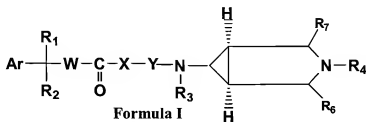


**Amendments to the Claims:**

Please cancel claim 16 and amend claim 15 as follows:

1. (Previously Amended) Compounds having the structure of Formula I:



and their pharmaceutically acceptable salts, pharmaceutically acceptable enantiomers, diastereomers, or N-oxides, wherein Ar represents an aryl or a heteroaryl ring having 1-2 hetero atoms selected from the group consisting of oxygen, sulphur and nitrogen atoms, the aryl or heteroaryl rings may be unsubstituted or substituted by one to three substituents independently selected from lower alkyl (C<sub>1</sub>-C<sub>4</sub>), lower perhaloalkyl (C<sub>1</sub>-C<sub>4</sub>), cyano, hydroxy, nitro, halogen (e.g. F, Cl, Br, I), lower alkoxy (C<sub>1</sub>-C<sub>4</sub>), lower perhalo- alkoxy (C<sub>1</sub>-C<sub>4</sub>), unsubstituted amino, N-lower alkylamino (C<sub>1</sub>-C<sub>4</sub>) or N-lower alkylamino carbonyl (C<sub>1</sub>-C<sub>4</sub>);

R<sub>1</sub> represents a hydrogen, hydroxy, hydroxymethyl, amino, alkoxy, carbamoyl or halogen (e.g. fluorine, chlorine, bromine and iodine);

R<sub>2</sub> represents alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl ring in which any 1-4 hydrogen atoms are substituted with halogen (e.g. F, Cl, Br, I), carbamoyl or lower alkyl;

W represents (CH<sub>2</sub>)<sub>p</sub>, where p represents 0 to 1;

X represents an oxygen, sulphur, NR or no atom wherein R represents hydrogen or C<sub>1</sub>-C<sub>6</sub> alkyl;

Y represents CHR<sub>5</sub>CO wherein R<sub>5</sub> represents hydrogen, methyl or (CH<sub>2</sub>)<sub>q</sub> wherein q represents 0 to 4;

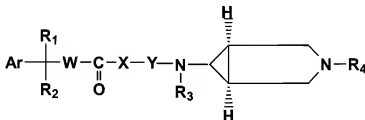
R<sub>3</sub> represents hydrogen, lower alkyl or CO<sub>2</sub>C(CH<sub>3</sub>)<sub>3</sub>;

R<sub>6</sub> and R<sub>7</sub> are independently selected from H, lower alkyl, COOH, CONH<sub>2</sub>, NH<sub>2</sub>, CH<sub>2</sub>NH<sub>2</sub>;  
and

R<sub>4</sub> represents C<sub>1</sub>-C<sub>15</sub> saturated or unsaturated aliphatic hydrocarbon (straight chain or branched) in which any 1 to 6 hydrogen atoms may be substituted with the group independently selected from halogen, arylalkyl, arylalkenyl, heteroarylalkyl or heteroarylalkenyl having 1 to 2 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur atoms with an option that any 1 to 3 hydrogen atoms on an aryl or heteroaryl ring in said arylalkyl, arylalkenyl, heteroarylalkenyl group may be substituted with lower alkyl (C<sub>1</sub>-C<sub>4</sub>), lower perhalo alkyl (C<sub>1</sub>-C<sub>4</sub>), cyano, hydroxy, nitro, lower alkoxy, carbonyl, halogen, lower alkoxy (C<sub>1</sub>-C<sub>4</sub>), lower perhaloalkoxy (C<sub>1</sub>-C<sub>4</sub>), unsubstituted amino, N-lower alkylamino (C<sub>1</sub>-C<sub>4</sub>), or N-lower alkylamino carbonyl (C<sub>1</sub>-C<sub>4</sub>).

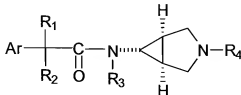
2. *(Previously Amended)* A compound according to claim 1 having the structure of Formula II and its pharmaceutically acceptable salts, pharmaceutically acceptable enantiomers, diastereomers, or N-oxides, wherein

Ar, R<sub>1</sub>, R<sub>2</sub>, W, X, Y, R<sub>3</sub> and R<sub>4</sub> are as defined for formula I.



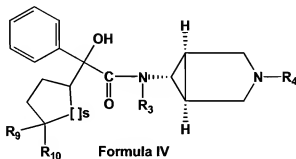
**Formula II**

3. *(Previously Amended)* A compound according to claim 1 having the structure of Formula III and its pharmaceutically acceptable salts, pharmaceutically acceptable enantiomers, diastereomers, or N-oxides, wherein Ar, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are as defined for Formula I.



**Formula III**

4. (Previously Amended) A compound according to claim 1 having the structure of Formula IV and its pharmaceutically acceptable salts, enantiomers, diastereomers, or N-oxides, wherein  $R_3$  and  $R_4$  are as defined for Formula I, and  $s$  represents 1 to 2,  $R_9$  is H or F and  $R_{10}$  is F.



5. (Previously Amended) A compound selected from the group consisting of
- (2S)-(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-6-N-[3-benzyl-3-azabicyclo[3.1.0]-hexyl]-2-[(1R or 1S)-3-oxocyclohexyl]-2-hydroxy-2-phenylacetamide;
- (2S)-(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-6-N-[3-benzyl-3-azabicyclo[3.1.0]-hexyl]-2-[(1R or 1S, 3R or 3S)-3-(fluorocyclohexyl)]-2-hydroxy-2-phenylacetamide;
- (2S)-(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-6-N-[3-benzyl-3-azabicyclo[3.1.0]-hexyl]-2-[(1R or 1S, 3R or 3S)-3-fluorocyclopentyl]-2-hydroxy-2-phenylacetamide;
- (2S)-(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-6-N-[3-benzyl-3-azabicyclo[3.1.0]-hexyl]-2-2[(1R or 1S)-3, 3-difluorocyclohexyl]-2-hydroxy-2-phenylacetamide;
- (2S)-(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-6-N-[3-benzyl-3-azabicyclo[3.1.0]-hexyl]-2-[(1R or 1S)-3,3-difluorocyclopentyl]-2-hydroxy-2-phenylacetamide;
- (2R)-(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-6-N-[3-benzyl-3-azabicyclo[3.1.0]-hexyl]-2-[(1R or 1S)-3,3-difluorocyclopentyl]-2-hydroxy-2-phenylacetamide;
- (2S)-(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-6-N-[3-(2-(3,4-methylenedioxyphenyl)ethyl)-3-azabicyclo[3.1.0]-hexyl]-2-[(1R or 1S)-3, 3-difluorocyclohexyl]-2-hydroxy-2-phenylacetamide;
- (2S)-(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-6-N-[3-(2-(3, 4-methylenedioxyphenyl)ethyl)-3-azabicyclo[3.1.0]-hexyl]-2-[(1R or 1S)-3, 3-difluorocyclopentyl]-2-hydroxy-2-phenylacetamide;
- (2R)-(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-6-N-[3-(2-(3,4-methylenedioxyphenyl)ethyl)-3-azabicyclo[3.1.0]-hexyl]-2-[(1R or 1S)-3, 3-difluorocyclopentyl]-2-hydroxy-2-phenylacetamide;

(2S)-(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-6-N-[3-(2-(3, 4-methylenedioxyphenyl)ethyl]-3-azabicyclo[3.1.0]-hexyl]-2-[(1R or 1S, 3R or 3S)-3-fluorocyclohexyl]-2-hydroxy-2-phenylacetamide;

(2S)-(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-6-N-[3-(2-(3, 4-methylenedioxyphenyl)ethyl]-3-azabicyclo[3.1.0]-hexyl]-2-[(1R or 1S, 3R or 3S)-3-fluorocyclopentyl]-2-hydroxy-2-phenylacetamide;

(2S)-(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-6-N-[3-(4-methyl-3-pentenyl)-3-azabicyclo[3.1.0]-hexyl]-2-[(1R or 1S)-3, 3-difluorocyclohexyl]-2-hydroxy-2-phenylacetamide;

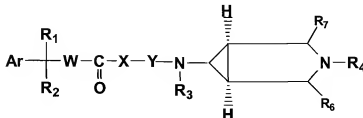
(2S)-(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-6-N-[3-(4-methyl-3-pentenyl)-3-azabicyclo[3.1.0]-hexyl]-2-[(1R or 1S)-3, 3-difluorocyclopentyl]-2-hydroxy-2-phenylacetamide;

(2R)-(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-6-N-[3-(4-methyl-3-pentenyl)-3-azabicyclo[3.1.0]-hexyl]-2-[(1R or 1S)-3, 3-difluorocyclopentyl]-2-hydroxy-2-phenylacetamide;

(2S)-(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-6-N-[3-(4-methyl-3-pentenyl)-3-azabicyclo[3.1.0]-hexyl]-2-[(1R or 1S, 3R or 3S)-3-fluorocyclohexyl]-2-hydroxy-2-phenylacetamide; and

(2S)-(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-6-N-[3-(4-methyl-3-pentenyl)-3-azabicyclo[3.1.0]-hexyl]-2-[(1R or 1S, 3R or 3S)-3-fluorocyclopentyl]-2-hydroxy-2-phenylacetamide.

6. *(Previously Amended)* A pharmaceutical composition comprising a therapeutically effective amount of a compound as defined in any one of claims 1-5 together with pharmaceutically acceptable carriers, excipients or diluents.
7. *(Previously Amended)* A method for treatment of an animal or a human suffering from a disease or disorder of the respiratory, urinary and gastrointestinal systems, wherein the disease or disorder is urinary incontinence, lower urinary tract symptoms (LUTS), bronchial asthma, chronic obstructive pulmonary disorders (COPD), pulmonary fibrosis, irritable bowel syndrome, obesity, diabetes and gastrointestinal hyperkinesis, comprising administering to said animal or human, a therapeutically effective amount of a compound having the structure of Formula I,



Formula I

and its pharmaceutically acceptable salts, pharmaceutically acceptable enantiomers, diastereomers, or N-oxides, wherein

Ar represents an aryl or a heteroaryl ring having 1-2 hetero atoms selected from the group consisting of oxygen, sulphur and nitrogen atoms, the aryl or heteroaryl rings may be unsubstituted or substituted by one to three substituents independently selected from lower alkyl (C<sub>1</sub>-C<sub>4</sub>), lower perhaloalkyl (C<sub>1</sub>-C<sub>4</sub>), cyano, hydroxy, nitro, halogen (e.g. F, Cl, Br, I), lower alkoxy (C<sub>1</sub>-C<sub>4</sub>), lower perhalo- alkoxy (C<sub>1</sub>-C<sub>4</sub>), unsubstituted amino, N-lower alkylamino (C<sub>1</sub>-C<sub>4</sub>) or N-lower alkylamino carbonyl (C<sub>1</sub>-C<sub>4</sub>);

R<sub>1</sub> represents a hydrogen, hydroxy, hydroxymethyl, amino, alkoxy, carbamoyl or halogen (e.g. fluorine, chlorine, bromine and iodine);

R<sub>2</sub> represents alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl ring in which any 1-4 hydrogen atoms are substituted with halogen (e.g. F, Cl, Br, I), carbamoyl or lower alkyl;

W represents (CH<sub>2</sub>)<sub>p</sub>, where p represents 0 to 1;

X represents an oxygen, sulphur, NR or no atom wherein R represents hydrogen or C<sub>1</sub>-C<sub>6</sub> alkyl;

Y represents CHR<sub>5</sub>CO wherein R<sub>5</sub> represents hydrogen, methyl or (CH<sub>2</sub>)<sub>q</sub> wherein q represents 0 to 4;

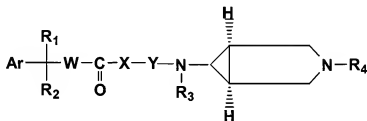
R<sub>3</sub> represents hydrogen, lower alkyl or CO<sub>2</sub>C(CH<sub>3</sub>)<sub>3</sub>;

R<sub>6</sub> and R<sub>7</sub> are independently selected from H, lower alkyl, COOH, CONH<sub>2</sub>, NH<sub>2</sub>, CH<sub>2</sub>NH<sub>2</sub>; and

R<sub>4</sub> represents C<sub>1</sub>-C<sub>15</sub> saturated or unsaturated aliphatic hydrocarbon (straight chain or branched) in which any 1 to 6 hydrogen atoms may be substituted with the group independently selected from halogen, arylalkyl, arylalkenyl, heteroarylalkyl or heteroarylalkenyl having 1 to 2 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur atoms with an option that any 1 to 3 hydrogen atoms on an aryl or heteroaryl ring in said arylalkyl, arylalkenyl, heteroarylalkenyl group may be substituted with lower alkyl (C<sub>1</sub>-C<sub>4</sub>), lower perhalo alkyl (C<sub>1</sub>-C<sub>4</sub>), cyano, hydroxy, nitro, lower

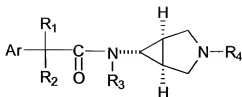
alkoxycarbonyl, halogen, lower alkoxy (C<sub>1</sub>-C<sub>4</sub>), lower perhaloalkoxy (C<sub>1</sub>-C<sub>4</sub>), unsubstituted amino, N-lower alkylamino (C<sub>1</sub>-C<sub>4</sub>), N-lower alkylamino carbonyl (C<sub>1</sub>-C<sub>4</sub>).

8. *(Previously Amended)* The method according to claim 7 for treatment of an animal or a human suffering from a disease or disorder of the respiratory, urinary and gastrointestinal systems, wherein the disease or disorder is urinary incontinence, lower urinary tract symptoms (LUTS), bronchial asthma, chronic obstructive pulmonary disorders (COPD), pulmonary fibrosis, irritable bowel syndrome, obesity, diabetes and gastrointestinal hyperkinesis, comprising administering to said animal or human, a therapeutically effective amount of a compound having the structure of Formula II and its pharmaceutically acceptable salts, pharmaceutically acceptable enantiomers, diastereomers, or N-oxides, wherein Ar, R<sub>1</sub>, R<sub>2</sub>, W, X, Y, R<sub>3</sub> and R<sub>4</sub> are as defined for Formula I.



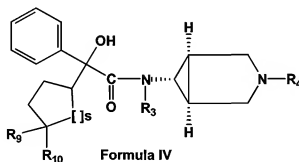
**Formula II**

9. *(Previously Amended)* The method according to claim 7 for treatment of an animal or a human suffering from a disease or disorder of the respiratory, urinary and gastrointestinal systems, wherein the disease or disorder is urinary incontinence, lower urinary tract symptoms (LUTS), bronchial asthma, chronic obstructive pulmonary disorders (COPD), pulmonary fibrosis, irritable bowel syndrome, obesity, diabetes and gastrointestinal hyperkinesis, comprising administering to said animal or human, a therapeutically effective amount of a compound having the structure of Formula III and its pharmaceutically acceptable salts, pharmaceutically acceptable enantiomers, diastereomers, or N-oxides, wherein Ar, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are as defined for Formula I.



**Formula – III**

10. *(Previously Amended)* The method according to claim 7 for treatment of an animal or a human suffering from a disease or disorder of the respiratory, urinary and gastrointestinal systems, wherein the disease or disorder is urinary incontinence, lower urinary tract symptoms (LUTS), bronchial asthma, chronic obstructive pulmonary disorders (COPD), pulmonary fibrosis, irritable bowel syndrome, obesity, diabetes and gastrointestina hyperkinesis, comprising administering to said animal or human, a therapeutically effective amount of a compound having the structure of Formula-IV and its pharmaceutically acceptable salts, pharmaceutically acceptable enantiomers, diastereomers, or N-oxides, wherein R<sub>3</sub> and R<sub>4</sub> are as defined for Formula I, s represents 1 to 2, R<sub>9</sub>=H or F, and R<sub>10</sub>=F.



**Formula IV**

11.-14. *(Previously Cancelled)*

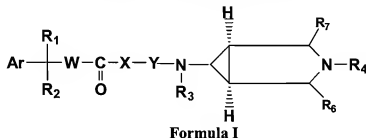
14. *(Previously Cancelled)*

15. *(Currently Amended)* The method for treatment or prophylaxis of an animal or a human suffering from a disease or disorder of the respiratory, urinary and gastrointestinal systems, wherein the disease or disorder is selected from urinary incontinence, lower urinary tract symptoms (LUTS), bronchial asthma, chronic obstructive pulmonary disorders (COPD), pulmonary fibrosis, irritable bowel syndrome, obesity, diabetes and gastrointestina

hyperkinesis mediated through muscarinic receptors, comprising administering to said animal or human, a therapeutically effective amount of the pharmaceutical composition according to claim 6.

16. (Cancelled)

17. (Previously Amended) A process of preparing compounds of Formula I,



and their pharmaceutically acceptable salts, pharmaceutically acceptable enantiomers, diastereomers, or N-oxides, wherein Ar represents an aryl or a heteroaryl ring having 1-2 hetero atoms selected from the group consisting of oxygen, sulphur and nitrogen atoms, the aryl or heteroaryl rings may be unsubstituted or substituted by one to three substituents independently selected from lower alkyl (C<sub>1</sub>-C<sub>4</sub>), lower perhaloalkyl (C<sub>1</sub>-C<sub>4</sub>), cyano, hydroxy, nitro, halogen (e.g. F, Cl, Br, I), lower alkoxy (C<sub>1</sub>-C<sub>4</sub>), lower perhalo- alkoxy (C<sub>1</sub>-C<sub>4</sub>), unsubstituted amino, N-lower alkylamino (C<sub>1</sub>-C<sub>4</sub>) or N-lower alkylamino carbonyl (C<sub>1</sub>-C<sub>4</sub>);

R<sub>1</sub> represents a hydrogen, hydroxy, hydroxymethyl, amino, alkoxy, carbamoyl or halogen (e.g. fluorine, chlorine, bromine and iodine);

R<sub>2</sub> represents alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl ring in which any 1-4 hydrogen atoms are substituted with halogen (e.g. F, Cl, Br, I), carbamoyl or lower alkyl;

W represents (CH<sub>2</sub>)<sub>p</sub>, where p represents 0 to 1;

X represents an oxygen, sulphur, NR or no atom wherein R represents hydrogen or C<sub>1</sub>-C<sub>6</sub> alkyl;

Y represents CHR<sub>5</sub>CO wherein R<sub>5</sub> represents hydrogen, methyl or (CH<sub>2</sub>)<sub>q</sub> wherein q represents 0 to 4;

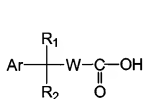
R<sub>3</sub> represents hydrogen, lower alkyl or CO<sub>2</sub>C(CH<sub>3</sub>)<sub>3</sub>;



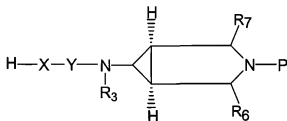
$R_6$  and  $R_7$  are independently selected from H, lower alkyl, COOH, CONH<sub>2</sub>, NH<sub>2</sub>, CH<sub>2</sub>NH<sub>2</sub>; and

$R_4$  represents C<sub>1</sub>-C<sub>15</sub> saturated or unsaturated aliphatic hydrocarbon (straight chain or branched) in which any 1 to 6 hydrogen atoms may be substituted with the group independently selected from halogen, arylalkyl, arylalkenyl, heteroarylalkyl or heteroarylalkenyl having 1 to 2 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur atoms with an option that any 1 to 3 hydrogen atoms on an aryl or heteroaryl ring in said arylalkyl, arylalkenyl, heteroarylalkenyl group may be substituted with lower alkyl (C<sub>1</sub>-C<sub>4</sub>), lower perhalo alkyl (C<sub>1</sub>-C<sub>4</sub>), cyano, hydroxy, nitro, lower alkoxy, carbonyl, halogen, lower alkoxy (C<sub>1</sub>-C<sub>4</sub>), lower perhaloalkoxy (C<sub>1</sub>-C<sub>4</sub>), unsubstituted amino, N-lower alkylamino (C<sub>1</sub>-C<sub>4</sub>), N-lower alkylamino carbonyl (C<sub>1</sub>-C<sub>4</sub>), comprising

- (a) condensing a compound of Formula VI with a compound of Formula V



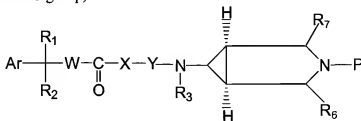
**Formula VI**



**Formula V**

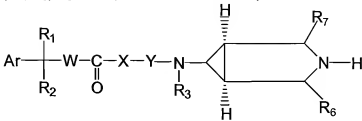
wherein Ar,  $R_1$ ,  $R_2$ , W, X, Y,  $R_3$ ,  $R_6$  and  $R_7$  are as defined earlier for Formula I, to give a protected compound of Formula VII wherein Ar,  $R_1$ ,

$R_2$ , W, X, Y,  $R_3$ ,  $R_6$  and  $R_7$  are as defined earlier and P is a protecting group for an amino group,



**Formula VII**

$R_3, W, X, Y, R_3, R_6$  and  $R_7$  are as defined earlier, and

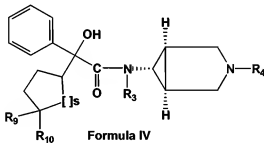


### Formula VIII

- (b) N-alkylated or benzylated the compound of Formula VIII with a suitable alkylating or benzylating agent to give compounds of Formula I wherein Ar, R<sub>1</sub>, R<sub>2</sub>, W, X, Y, R<sub>3</sub>, R<sub>4</sub>, R<sub>6</sub> and R<sub>7</sub> are as defined earlier.

18.-26. (Previously Cancelled)

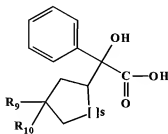
27. (Previously Amended) A process of preparing compounds of Formula IV,



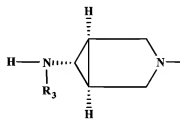
and their pharmaceutically acceptable salts, pharmaceutically acceptable enantiomers, diastereomers, or N-oxides, wherein R<sub>3</sub> represents hydrogen, lower alkyl or CO<sub>2</sub>C(CH<sub>3</sub>)<sub>3</sub>; R<sub>4</sub> represents C<sub>1</sub>-C<sub>15</sub> saturated or unsaturated aliphatic hydrocarbon (straight chain or branched) in which any 1 to 6 hydrogen atoms may be substituted with the group independently selected from halogen, arylalkyl, arylalkenyl, heteroarylalkyl or heteroarylalkenyl having 1 to 2 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur atoms with an option that any 1 to 3 hydrogen atoms on an aryl or heteroaryl ring in said arylalkyl, arylalkenyl, heteroarylalkenyl group may be substituted with lower alkyl (C<sub>1</sub>-C<sub>4</sub>), lower perhalo alkyl (C<sub>1</sub>-C<sub>4</sub>), cyano, hydroxy, nitro, lower alkoxy, carbonyl, halogen, lower alkoxy

(C<sub>1</sub>-C<sub>4</sub>), lower perhaloalkoxy (C<sub>1</sub>-C<sub>4</sub>), unsubstituted amino, N-lower alkylamino (C<sub>1</sub>-C<sub>4</sub>), N-lower alkylamino carbonyl (C<sub>1</sub>-C<sub>4</sub>); s represents 1 to 2, R<sub>9</sub> is H or F and R<sub>10</sub> is F, comprising

- (a) condensing a compound of Formula IX with a compound of Formula X

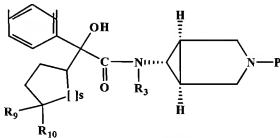


**Formula IX**



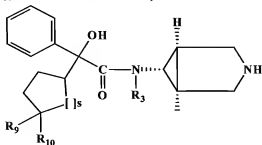
**Formula X**

wherein R<sub>3</sub> and R<sub>4</sub> are as defined earlier for Formula I, s represents 1 to 2, R<sub>9</sub> is H or F and R<sub>10</sub> is F, to give a protected compound of Formula XI wherein R<sub>3</sub>, R<sub>4</sub>, s, R<sub>9</sub> and R<sub>10</sub> are as defined earlier and P is a protecting group for an amino group,



**Formula XI**

- (b) deprotecting the compound of Formula XI in the presence of a deprotecting agent to give an unprotected compound of Formula XII wherein R<sub>3</sub>, R<sub>4</sub>, s, R<sub>9</sub> and R<sub>10</sub> are as defined earlier, and



**Formula XII**

- (c) N-alkylated or benzylated the compound of Formula XII with a suitable alkylating or benzylating agent to give compounds of Formula IV wherein  $R_3$ ,  $R_4$ ,  $s$ ,  $R_9$  and  $R_{10}$  are as defined earlier.

28– 36. *(Previously Cancelled)*